



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 533 245 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
25.05.2005 Bulletin 2005/21

(51) Int Cl.7: **B65D 51/28, B65D 81/32,
B65D 8/00, B65D 77/24**

(21) Application number: **03425731.1**

(22) Date of filing: **13.11.2003**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR**
Designated Extension States:
AL LT LV MK

(72) Inventor: **Terrasi, Giuseppe**
12050 Benevello (Cuneo) (IT)

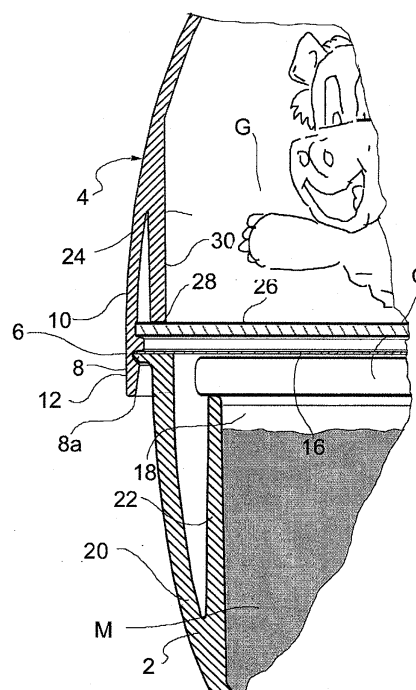
(74) Representative: **Rambelli, Paolo et al**
Jacobacci & Partners S.p.A.
Corso Emilia, 8
10152 Torino (IT)

(71) Applicants:
• **SOREMARTEC S.A.**
6700 Arlon-Schoppach (BE)
Designated Contracting States:
**AT BE BG CH LI CY CZ DK EE ES FI FR GB GR
HU IE LU MC NL PT RO SE SI SK TR**
• **Ferrero S.p.A.**
12051 Alba (Cuneo) (IT)
Designated Contracting States:
IT
• **Ferrero Offene Handelsgesellschaft m.b.H.**
60599 Frankfurt/Main 70 (DE)
Designated Contracting States:
DE

(54) **A container for food products**

(57) A container for food products comprises two half-shells (2, 4) which can be fitted together mouth to mouth and each of which defines a respective containing chamber (18, 24) for receiving a food product (M) or an accessory (G), respectively. The two half-shells (2, 4) are connected to one another by form-fit connection means (6, 8, 12); one (2) of the half-shells, which defines the chamber (18) for receiving the food product (M), is closed by means of a sealing foil (16) that is applied to its mouth profile and the other half-shell (4), which defines the chamber (24) for containing the accessory (G), is closed by means of a transverse partition (26) which is associated with the wall (10) of the half-shell (4) by form-fit means in a position set back relative to the mouth end of the half-shell (4).

Fig.2



EP 1 533 245 A1

Description

[0001] The present invention relates to a container for food products of the type comprising a first half-shell and a second half-shell which can be fitted together mouth to mouth and each of which defines a respective first or second containing chamber for receiving a food product or an accessory such as a toy or the like, respectively.

[0002] A container of the type mentioned is described in EP-A-0 768 039 and in EP-A-0 919 488. In the embodiments described therein, both of the two half-shells of plastics material have flanged rims to which a sealing foil is applied and the half-shells are connected to one another along the flanged rims, for example, by ultrasound or electric welding or the like.

[0003] These containers generally have an egg-like shape which is desirable but which has an oval flange of considerable dimensions which is not desirable from the aesthetic point of view but is necessary to permit the connection between the two half-shells. Moreover, the egg-shaped container is divided into two half-shells along a plane of symmetry so that the two half-shells are fitted together along their oval mouth profiles.

[0004] In this situation, the display of the product in a vertical position is problematical, particularly when the food product is constituted by a composition of a creamy consistency which can flow since, in the vertical position, the cream comes into contact with the sealing foil.

[0005] For the same reasons, the spreading accessory which is generally associated with the container to enable the creamy food composition to be consumed has to be positioned outside the half-shell including the food composition to prevent the accessory coming into contact with the creamy composition as a result of the display of the container in a vertical position or as a result of its being positioned vertically during transportation and/or handling.

[0006] The present invention provides a novel structure for a container of the above-mentioned type which overcomes the above-mentioned possible problems.

[0007] An object of the invention is therefore a container or package for food products comprising two half-shells which can be fitted together mouth to mouth and each of which defines a respective containing chamber, closed by a closure element, for receiving a food product or an accessory, respectively, characterized in that the two half-shells are connected to one another by form-fit connection means and in that one of the half-shells, which defines the chamber for containing the food product, is closed by means of a sealing foil that is applied to the mouth profile, and the other half-shell, which defines the chamber for containing the accessory, is closed by means of a transverse partition which is associated with the wall of the half-shell by form-fit means in a position set back relative to the mouth end of the half-shell.

[0008] Further characteristics of the container according to the invention are defined in the appended claims.

[0009] In the appended drawings, which are provided by way of non-limiting example:

Figures 1 and 1B are front views of containers according to the invention,

Figure 2 is a section through a portion of the container of Figure 1,

Figure 3 is a section through one of the half-shells, and

Figure 4 is a section through the other of the half-shells.

[0010] As shown in Figure 1, the container according to the invention preferably has a generally egg-shaped configuration formed by a first half-shell 2 constituting the base and by a second half-shell 4 constituting the top, the mouth of each half-shell having a substantially circular profile.

[0011] Although this configuration is to be considered preferable, the structural characteristics described below are not intended to be considered as being limited to this configuration. In particular, the top half-shell 4 may have a more or less tapered shape or may be shaped in a manner such that the container as the whole adopts a generally drop-shaped configuration, whilst preferably retaining a circular mouth profile.

[0012] The base half-shell 2 preferably has a spheroidal wall but base half-shells provided with integral pedestals, as indicated in Figure 1b, or having a flat bearing surface may also be used.

[0013] The two half-shells 2 and 4 are made of plastics material suitable for contact with foodstuffs and are preferably produced by an injection-moulding technique, although they may also be produced by other forming techniques, for example, by thermoforming.

[0014] In the embodiment illustrated, the half-shell 2 has its mouth fitted in the mouth opening of the half-shell 4 and the two half-shells are connected to one another by form-fit connection means, particularly by snap, push or screw connection means, for example, of the mortise and tenon type.

[0015] More particularly, the form-fit connection means may, for example, comprise an annular rib or flange 6 which extends around the mouth of the container 2 and which can engage a groove 8 which is complementary therewith and is formed in the side wall 10 of the half-shell 4, adjacent its mouth, and which defines an end tooth 8a that engages the rib.

[0016] Preferably, to facilitate the opening of the container, the form fit between the two half-shells does not take place along the entire mouth profiles of the two half-shells but is limited to discrete, angularly spaced-apart regions. For this purpose, as indicated in the embodiment illustrated, the groove 8 is formed in a plurality of angularly spaced-apart terminal appendages 12 of the

half-shell 4. For example, there may be from two to six appendages 12 in the half-shell 4.

[0017] The annular flange or rib 6 has a generally flat, annular upper surface 14 to which a thin sealing foil 16 of the type commonly used for sealing food products is applied by welding, by known welding techniques; the foil is constituted, for example, by an aluminium foil, by a laminated foil of aluminium and plastics material, or by plastics material. The sealing foil 16 may have a peripheral gripping tab (not shown) for facilitating its removal by the consumer.

[0018] The half-shell 2 defines in its interior a chamber 18 in which a food mass of a confectionery product M such as, for example, a composition of creamy or pasty consistency, is enclosed.

[0019] According to another preferred characteristic, support means are associated with the wall 20 of the half-shell 2 for supporting an extraction member, such as, for example, a generally flat spatula or a spoon C which is arranged inside the chamber 18, bearing on the support means.

[0020] The support means may be constituted, for example, by an annular shoulder or flange extending from the wall 20 of the half-shell 2 towards the interior of the chamber 18 at a predetermined distance from the mouth of the container, so as to enable the spatula or spoon C to be arranged in a transverse position with its ends bearing on the upper face of the annular flange or shoulder.

[0021] Preferably, as illustrated in the drawings, the support means comprise a tubular wall 22 which is integral with the wall 20 and which extends from an intermediate region of the wall 20 of the half-shell 2 towards the mouth of the half-shell.

[0022] The spatula or spoon C is arranged transversely with its ends bearing on the end of the wall 22 which faces towards the mouth of the half-shell 2. This solution is preferable and advantageous since the wall 22 also acts as a wall for confining the food composition M, preventing it from coming into contact with the regions of the sealing foil 16 that are adjacent its welding region.

[0023] The solution described enables the spatula or spoon C to be positioned inside the half-shell 2 containing the food mass, ensuring that the package is more hygienic.

[0024] The half-shell 4, which defines in its interior a chamber 24 for receiving an accessory or toy G constituting a so-called gift, is closed by a fairly rigid transverse partition 26, generally made of plastics material which engages with a form fit in an annular groove or channel formed in the wall 10 of the half-shell 4 in a position that is set back relative to the mouth ends of the wall 10 of the half-shell 4.

[0025] Preferably, the wall 10 of the half-shell 4 comprises support means for the closure partition 26; the support means are constituted, for example, by a tubular wall 30 which is integral with the wall 10 and of which

the ends facing towards the mouth of the half-shell 4 act as a support for the transverse closure partition 26.

[0026] It is intended that the support means 30 may also be formed by discontinuous, angularly spaced-apart wall elements, rather than by a continuous tubular wall.

[0027] The closure partition 26 may optionally comprise a tab 32 which is integral with the body of the partition 26 and which is bent, for example, with the aid of a film hinge, onto the face of the partition 26 that faces outwardly, to facilitate the removal of the partition 26 by the consumer and the consequent extraction of the gift.

[0028] The container according to the invention is intended generally to be packaged in turn in packages each of which comprises a plurality of containers and which are arranged for keeping the containers in a vertical or inclined position.

[0029] In particular, in the embodiment shown the drawings, in which the container has a generally egg-shaped configuration, it is possible, by suitable proportioning of the food mass M and a suitable selection of the accessory G and of its weight, to arrange for the container to be able to adopt a vertical position of stable equilibrium with the half-shell 2 that has a rounded wall acting as a support base, without the need to provide a pedestal or the like or to modify the shape of the half-shell 2 to provide a flat support base, for example, of the type illustrated in Figure 1B.

[0030] The container can easily be opened by the consumer by releasing the form-fit connection means. Once this operation has been performed, the two half-shells constitute independent containers which can be handled separately and opened by the consumer.

[0031] The fact that the spoon or spatula C is sealed inside the chamber 18 of the half-shell 2 and is thus not exposed to the outside atmosphere as a result of the opening of the container ensures that the package is completely hygienic.

[0032] Naturally, the principle of the invention remaining the same, the forms of embodiment and details of construction may be varied widely with respect to those described and illustrated by way of non-limiting example, without thereby departing from the scope of the appended claims.

Claims

1. A container for food products comprising two half-shells (2, 4) which can be fitted together mouth to mouth and each of which defines a respective containing chamber (18, 24) for receiving a food product (M) or an accessory (G), respectively, **characterized in that** the two half-shells (2, 4) are connected to one another by form-fit connection means (6, 8, 12), and **in that** one (2) of the half-shells, which defines the chamber (18) for receiving the food product (M), is closed by means of a sealing

foil (16) that is applied to its mouth profile, and the other half-shell (4), which defines the chamber (24) for containing the accessory (G), is closed by means of a transverse partition (26) which is associated with the wall (10) of the half-shell (4) by form-fit means (28) in a position set back relative to the mouth end of the half-shell (4).

2. A container according to Claim 1, **characterized in that** the form-fit connection means comprise a flange or rib (6) projecting radially from the mouth profile of one half-shell (2) and a groove (8), complementary with the flange or rib and formed in the end region of the wall (10) of the other half-shell (4), adjacent its mouth. 10
15
3. A container according to Claim 2, **characterized in that** the form-fit connection means comprise a plurality of appendages (12) of the wall (10) of a half-shell (4), each appendage (12) being provided with a groove (8) extending circumferentially and defining a tooth (8a) which can engage the annular rib (6). 20
4. A container according to any one of Claims 1 to 3, **characterized in that** the wall (20) of the half-shell (2) defining the chamber which is to receive the food product (M) comprises support means (22) for supporting an extraction member such as a spatula or spoon (C) arranged transversely inside the half-shell (2) and bearing on the support means (22). 25
30
5. A container according to Claim 4, **characterized in that** the support means comprise a tubular wall (22) integral with the wall (20) defining the half-shell (2), the tubular wall (22) extending from an intermediate region of the wall (20) of the half-shell (2) to the vicinity of the sealing foil (16). 35
6. A container according to any one of Claims 1 to 5, **characterized in that** the transverse partition (26) comprises an associated tab (32) for extracting the partition (26), the tab being bent onto the face of the partition (26) which faces towards the exterior of the half-shell (4). 40
45
7. A container according to Claim 6, **characterized in that** the half-shell (4) defining the chamber for receiving the accessory (G) comprises auxiliary support means (30), integral with the wall (10) of the half-shell (4), for supporting the transverse partition (26). 50
8. A container according to Claim 7, **characterized in that** the auxiliary support means comprise a tubular wall (30) of which the end that faces towards the mouth of the half-shell (4) supports the transverse partition (26). 55

9. A container according to any one of the preceding claims, **characterized in that** it has a generally egg-shaped configuration in which one (2) of the half-shells constitutes the base and the other half-shell (4) constitutes the top, the mouths of the half-shells (2, 4) having a substantially circular profile.

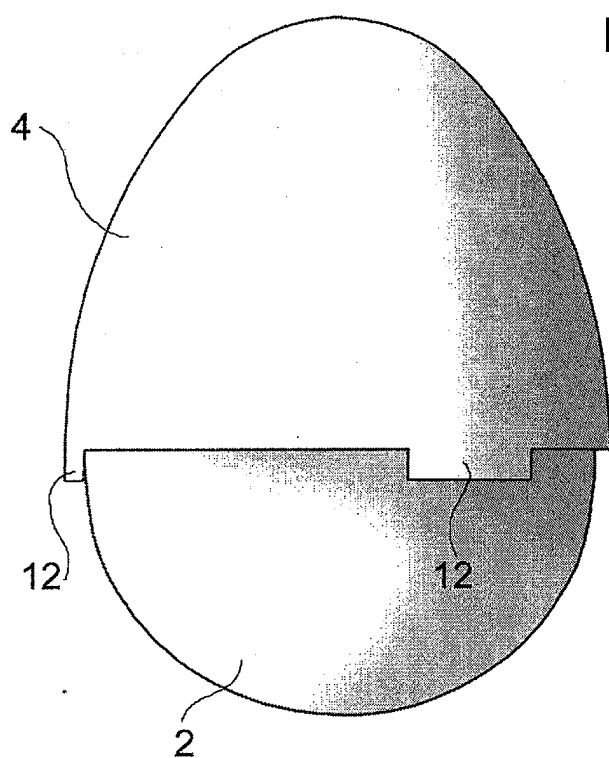


Fig. 1

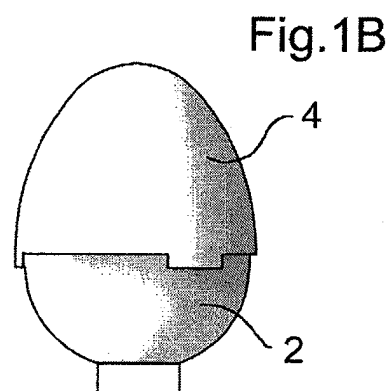
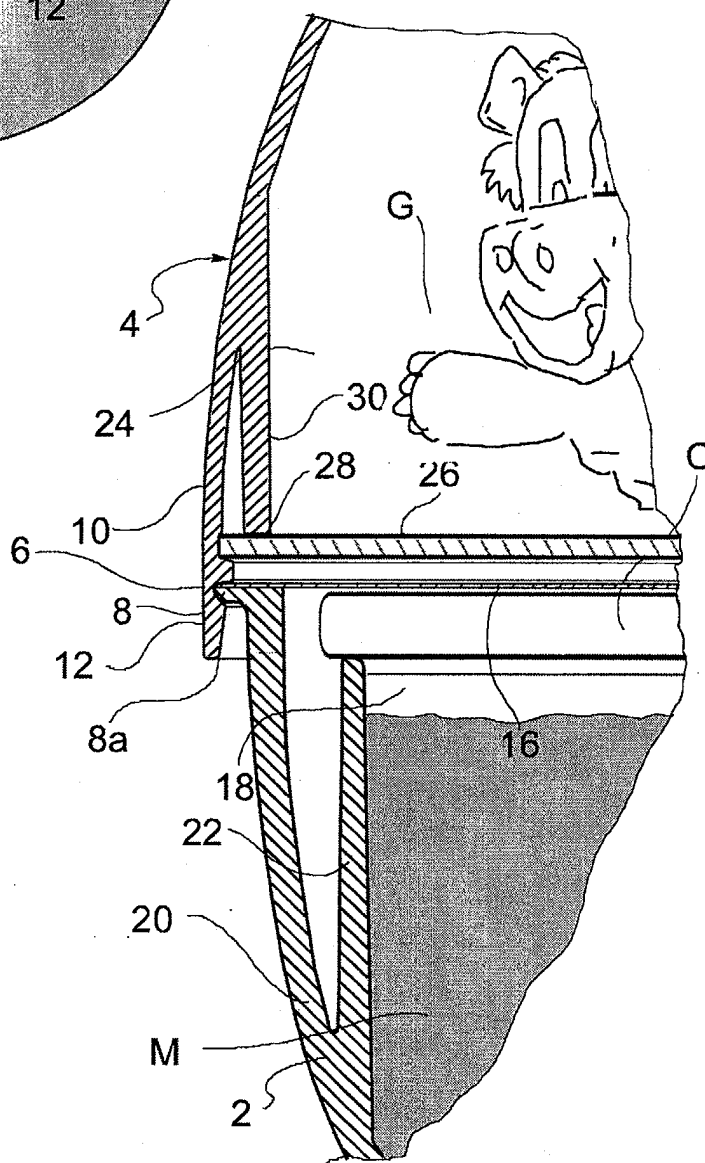
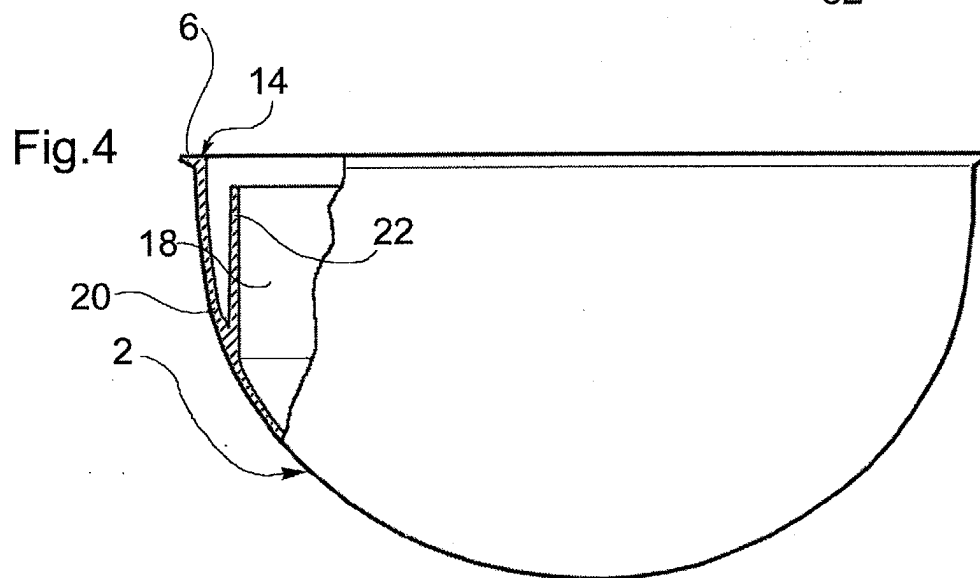
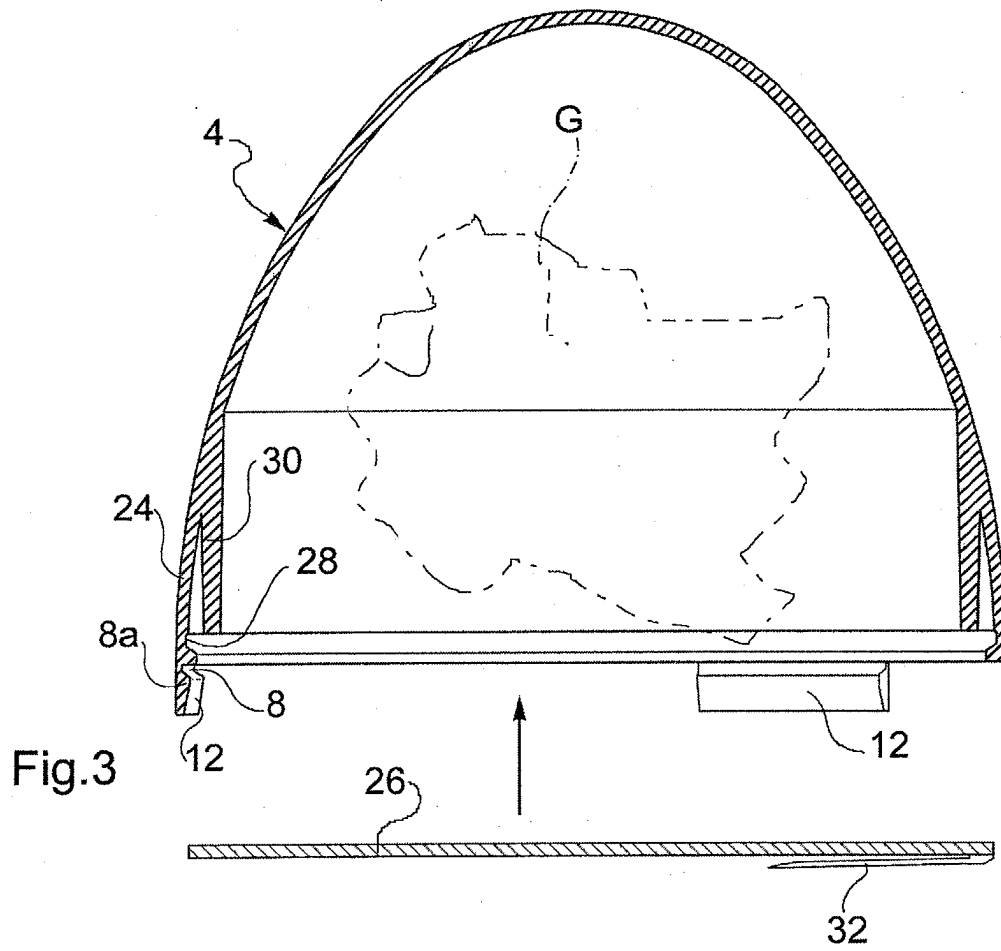


Fig. 1B

Fig. 2







European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 42 5731

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 2002/175093 A1 (PLUMB WILLIAM L ET AL) 28 November 2002 (2002-11-28)	1,2	B65D51/28 B65D81/32 B65D8/00 B65D77/24
A	* page 4, paragraph 58 * * page 5, paragraph 67 * * page 5, paragraph 71 * * figures 8,9 *	3,6-9	
X	WO 99/36319 A (LEIGH GARRISON) 22 July 1999 (1999-07-22) * page 8, line 29 - page 9, line 19; figure 1 *	1,6	
Y	DE 79 21 019 U (FERRERO OHG) 18 October 1979 (1979-10-18) see pages 7, 8; fig. 1	1,9	
Y	US 4 465 190 A (CILLARIO LORENZO) 14 August 1984 (1984-08-14) * column 1, line 7 - column 1, line 50; figure 2 *	1,9	
D,A	EP 0 768 039 A (SOREMARTEC SA ;FERRERO OHG (DE); FERRERO SPA (IT)) 16 April 1997 (1997-04-16) * claim 1; figures 1-4 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7) B65D A47G
X	DE 195 33 240 A (CHRISTMANN MARKUS) 13 March 1997 (1997-03-13)	4	
A	* column 5, lines 16-20; figure 1 *	5	
X	FR 2 822 139 A (FLEURY MICHON) 20 September 2002 (2002-09-20)	4	
A	* page 5, lines 12-22; figure 1 *	5	
A	EP 0 965 539 A (PLASTICOS ESPELT S L) 22 December 1999 (1999-12-22) * abstract; figure 1 *	4,5	
-/--			
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 1 April 2005	Examiner Visentin, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

 7
EPO FORM 1503 03.82 (P04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 42 5731

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	DE 77 14 613 U (HANSA MEIEREI HAMBURG) 5 January 1978 (1978-01-05) * the whole document * -----	4,5	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 1 April 2005	Examiner Visentin, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

 7
EPO FORM 1503 03.82 (P04C01)



European Patent
Office

Application Number
EP 03 42 5731

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



European Patent
Office

LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 03 42 5731

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-3, 6-9

container comprising two half shells defining two separate chambers and which can be fitted together mouth to mouth by form-fit connection, one of the chamber being closed by means of a sealing foil, the other chamber being closed by means of a transverse partition which is connected to the half-shell by form-fit connection means

2. claims: 4, 5

container comprising two half shells defining two separate chambers, the inner wall of one of said chamber comprising support means for supporting an extraction member such a spatula or spoon arranged transversely inside the half shell

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 42 5731

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-04-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002175093	A1	28-11-2002	US 2002011425 A1	31-01-2002
			US 6533114 B1	18-03-2003
			US 6216857 B1	17-04-2001
			US 2004217033 A1	04-11-2004
			US 2002189958 A1	19-12-2002
			US 2002005365 A1	17-01-2002
			US 2002070131 A1	13-06-2002
			US 2002066681 A1	06-06-2002
			AU 771585 B2	25-03-2004
			AU 6042399 A	17-04-2000
			BR 9914060 A	16-10-2001
			CA 2345094 A1	06-04-2000
			CN 1325358 A	05-12-2001
			CZ 20011010 A3	12-06-2002
			EP 1177142 A1	06-02-2002
			HU 0103872 A2	28-02-2002
			JP 2002525250 T	13-08-2002
			NO 20011375 A	23-05-2001
			NZ 510717 A	25-02-2005
			PL 347905 A1	22-04-2002
			SI 20634 A	28-02-2002
			SK 4082001 A3	02-07-2002
			TR 200101485 T2	22-10-2001
			WO 0018663 A1	06-04-2000
			US 2002139695 A1	03-10-2002
			US 2002139696 A1	03-10-2002
			US 2002189957 A1	19-12-2002
			US 2003062272 A1	03-04-2003
			US 6349821 B1	26-02-2002
			US 6364102 B1	02-04-2002
			US 2002063081 A1	30-05-2002
			US 6412629 B1	02-07-2002
			US 6330943 B1	18-12-2001
			US 6371289 B1	16-04-2002
			US 2001045368 A1	29-11-2001
			US 2002139694 A1	03-10-2002
			US 2002020638 A1	21-02-2002
			US 2002046959 A1	25-04-2002
			US 2002020639 A1	21-02-2002
			US 2002005366 A1	17-01-2002
			US 2005051442 A1	10-03-2005

WO 9936319	A	22-07-1999	AU 2323699 A	02-08-1999
			WO 9936319 A1	22-07-1999

DE 7921019	U	18-10-1979	DE 7921019 U1	18-10-1979

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 42 5731

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-04-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4465190	A	14-08-1984	AU 555493 B2	25-09-1986
			AU 1349383 A	26-01-1984
			DE 8311271 U1	10-11-1983
			FR 2537098 A3	08-06-1984
			GB 2123377 A ,B	01-02-1984

EP 0768039	A	16-04-1997	CH 691279 A5	29-06-2001
			AT 196058 T	15-09-2000
			AU 702306 B2	18-02-1999
			AU 6800596 A	24-04-1997
			BG 62358 B1	30-09-1999
			BG 100896 A	30-09-1997
			BR 9604374 A	16-06-1998
			CA 2187254 A1	17-04-1997
			CN 1153735 A ,C	09-07-1997
			CZ 9603019 A3	14-05-1997
			DE 69610178 D1	12-10-2000
			DE 69610178 T2	31-05-2001
			DK 768039 T3	13-11-2000
			EA 960083 A1	30-06-1997
			WO 9714316 A1	24-04-1997
			EP 0768039 A1	16-04-1997
			ES 2151628 T3	01-01-2001
			GR 3034965 T3	28-02-2001
			HK 1001284 A1	04-10-2002
			HU 9602836 A2	28-07-1997
			IL 119398 A	01-06-2000
			JP 9163931 A	24-06-1997
			NO 964383 A	17-04-1997
			NZ 299520 A	24-10-1997
			OA 10318 A	19-09-1997
			PL 316548 A1	28-04-1997
			PT 768039 T	29-12-2000
			RO 117291 B	30-01-2002
			SK 132296 A3	07-05-1997
			US 5728414 A	17-03-1998
			ZA 9608684 A	21-05-1997

DE 19533240	A	13-03-1997	DE 19533240 A1	13-03-1997

FR 2822139	A	20-09-2002	FR 2822139 A1	20-09-2002

EP 0965539	A	22-12-1999	ES 1040621 U1	01-05-1999
			CA 2274274 A1	16-12-1999
			EP 0965539 A1	22-12-1999

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 42 5731

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on

The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-04-2005

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 7714613 U	05-01-1978	DE 7714613 U1	05-01-1978

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82